

10/585959

RECEIVED 13 JUL 2005

Docket No.: 215384-106379  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

---

In re Patent Application of:  
Chang-Jun Ahn et al.

Application No.: National Phase of  
PCT/JP2004/000174

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: Communication System, Transmitter, Receiver,  
Transmitting Method, Receiving Method, and  
Program

---

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

MS: PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-3145, under Order No. 215384-106379.

Dated: July 12, 2006

Respectfully submitted,

By 

Joseph V. Coppola, Sr.

Registration No.: 33,373

HONIGMAN MILLER SCHWARTZ AND  
COHN LLP

38500 Woodward Avenue

Suite 100

Bloomfield Hills, Michigan 48304-5048

(248) 566-8500

Attorney for Applicant

10/585959

AP20 Rec'd PCT/PTO 13 JUL 2006

Application No. (if known): Not Yet Assigned

Attorney Docket No.: 215384-106379

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV757540191US in an envelope addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on July 13, 2006  
Date

  
Signature

Joyce A. Krumpe

Typed or printed name of person signing Certificate

Registration Number, if applicable

(248) 566-8372  
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

IDS (Citation) by Applicant (6 References) (1 page)  
Information Disclosure Statement (2 pages)

AP20 Rec'd PCT/PTO 13 JUL 2006

PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<i>Complete if known</i>	
				<b>10/585959</b>	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Chang-Jun Ahn
				Art Unit	N/A
Examiner Name	Not Yet Assigned				
Attorney Docket Number	215384-106379				
Sheet	1	of	1		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Reverse Link Performance Improvement for Dynamic Parameter Controlled OFDM Using Alamouti Coded Heterogeneous Polarization Antennas (The Institute of Electronics, Information and Communication Engineers), Technical Report of IEICE, DSP2003-153, SAT2003-150, RC2003-248(2004-01)	
	CB	A Simple Theoretical Model for Polarization Diversity Reception in Wireless Mobile Environments, IEEE Antennas and Propagation Society International Symposium, 1999 Digest Vol. 2, July 11-16, 1999 Orlando, Florida	
	CC	Convolutional Coded Coherent and Differential Unitary Space-Time Modulated OFDM With Bit Interleaving for Multiple Antennas System (The Institute of Electronics, Information and Communication Engineers) Technical Report of IEICE, SST2002-47 (2002-10)	
	CD	On Extended Alamouti Schemes for Space-Time Coding, Published in the Proceedings of 5th International Symposium on Wireless Personal Multimedia Communications, Oct. 27-30, 2002 Hawaii	
	CE	Experimental Results of Cross Polarization Discrimination and Signal Correlation Values for a Polarization Diversity Scheme, 1997 IEEE 47th Vehicular Technology Conference, Phoenix, AZ, May 4-7, 1997	
	CF	Space Division Multiplexing (SDM) for OFDM Systems, 2000 IEEE, 51st Vehicular Technology Conference Proceedings, May 15-18, 2000 Tokyo, Japan	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
--------------------	--	-----------------	--